CLAIMS

1. Diaphragm pump (1) comprising a working diaphragm (3) that, during pumping movements, oscillates between a bottom dead center and an top dead center; said working diaphragm delimits a pump chamber (7) between itself and a preferably concave pump chamber wall (6) and when located at the top dead center, the working diaphragm (3) rests against the pump chamber wall (6), characterized in that the working diaphragm (3) has an inner and an outer annular zone (8, 9), which can be deformed during the pumping movements, and that between the annular zones (8, 9) there is a stiffened diaphragm area, which is generally non-deformable during the pumping movements.

2. Diaphragm pump according to Claim 1, characterized in that the working diaphragm (3) is stiffened in the stiffened, non-deformable diaphragm area by support ribs (10), which are oriented in a radial direction, which are spaced apart from each other in a circumferential direction, and which are arranged on a lower side of the diaphragm facing away from the pump chamber wall (6).

3. Diaphragm pump according to Claim 1 or 2, characterized in that the support ribs (10) have a curved longitudinal extent (cf. Figure 4).

4. Diaphragm pump according to Claim 1 or 2, characterized in that the support ribs (10) have a straight longitudinal extent (cf. Figure 3).

5. Diaphragm pump according to one of Claims 1 to 4, characterized in that the support ribs (10) deviate from radial lines preferably by up to plus/minus 30°.

6. Diaphragm pump according to one of Claims 1 to 5, characterized in that the support ribs (10) are spaced apart from each other in a circumferential direction and have the same direction of curvature or deviation from radial lines.

7. Diaphragm pump according to one of Claims 1 to 6, characterized in that a side of the support ribs (10) facing the pump chamber wall (6) is adapted in shape to a contour of the pump chamber wall (6).